AMENDMENTS TO THE SPECIFICATION

In the specification at page 1, line 2, please insert the following the following heading:

FIELD OF THE INVENTION

In the specification at page 1, after line 17 but before line 18, please insert the following heading:

DESCRIPTION OF RELATED ART

In the specification at page 6, after line 12 but before line 13, please insert the following headings and paragraphs:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows vector map of pSUN3CeLPLAT.

Figure 2 shows amino acid sequence alignment of C. elegans LPLATs (Ce-T06E8.1 and Ce-F59F4.4) with the M. musculus LPAAT (Mm-NP061350).

Figure 3 shows fatty acid profiles of transgenic C13ABYS86 *S. cerevisiae* cells.

Figure 4 shows elongation of exogenously applied $18:2^{\Delta9,12}$ and $18:3^{\Delta9,12,15}$, respectively, following their endogenous Δ-6-desaturation (data from Figs. 2 and 3).

Figure 5 shows fatty acid profiles of transgenic C13ABYS86 *S. cerevisiae* cells.

Figure 6 shows acyl-CoA composition of transgenic INVSc1 yeasts which had been transformed with the vectors pESCLeu PpD6Pse1/pYes2 (A) or pESCLeu-PpD6-Pse1/pYes2-T06E8.1 (B).

Figure 7 shows fatty acid profiles of transgenic INVSc1 *S. cerevisiae* cells.

Figure 8 shows fatty acid profiles of transgenic INVSc1 *S. cerevisiae* cells.

Figure 9A shows vector map of pGPTV LeB4-700 + T06E8.1.

Figure 9B shows vector map of pGPTV USP/OCS-1,2,3 PSE1(Pp)+D6-Des(Pt)+2AT (T06E8-1).

Figures 10A and 10B show biosynthetic pathway of LCPUFAs.

Figure 11 shows comparison of GPAT and LPAAT substrate specificities in linseed, sunflower and *Mortierella alpine.*

Figure 12 shows comparison of LPCAT substrate specificity in linseed, sunflower and *Mortierella alpine.*

Figure 13 shows alignment of SEQ ID NO: 2 with Swiss Prot database.

Figure 14 shows alignment of SEQ ID NO: 5 with Swiss Prot database.

Figure 15 shows alignment of SEQ ID NO: 35 with Swiss Prot database.

Figure 16 shows alignment of SEQ ID NO: 23 with Swiss Prot database.

Figure 17 shows alignment of SEQ ID NO: 27 with Swiss Prot database.

Figure 18 shows alignment of SEQ ID NO: 8 with Swiss Prot database.

Figure 19 shows alignment of SEQ ID NO: 10 with Swiss Prot database.

Figure 20 shows alignment of SEQ ID NO: 12 with Swiss Prot database.

Figure 21 shows Western blot analyses of the *Thraustochytrium* LPAAT expressed in *E. coli* as fusion protein (LPAAT-FP) with N-terminal GST tag and C-terminal His tag (A) and acyl-CoA specificity of the *Thraustochytrium* LPAAT expressed as GST fusion protein in *E. coli* (B).

Figure 22 shows Western blot analysis of the *Shewanella* LPAAT expressed in *E. coli* as fusion protein with C-terminal His tag (A) and functional expression of the *Shewanella* LPAAT in *E. coli* (B).

Figure 23 shows expression of Mortierella LPAAT (MaB4_AT) in yeast, and feeding of 18:2 Δ9,12 fatty acids (A + B).

Figure 24 shows expression of Mortierella LPAAT (MaB4_AT) in yeast, and feeding of 18:3 Δ9,12,15 fatty acids (C + D).

Figure 25 shows expression of Mortierella LPAAT (MaB4_AT) in yeast, and feeding of 18:2 Δ9,12 fatty acids (A + B). Analysis of the neutral lipids.

Figure 26 shows expression of Mortierella LPAAT (MaB4_AT) in yeast, and feeding of 18:3 Δ9,12,15 fatty acids (C + D). Analysis of the neutral lipids.

DETAILED DESCRIPTION OF THE INVENTION